DOCUMENT RESUME

ED 041 796 SO 000 150

TITLE Graduate Education in the Social Sciences. Report of Master Plan Committee R.

INSTITUTION Illinois State Board of Higher Education, Springfield. Master Plan Committee.

PUB DATE Jun 69

NOTE 29p.

EDRS PRICE EDRS Price MF-$0.25 HC-$1.55

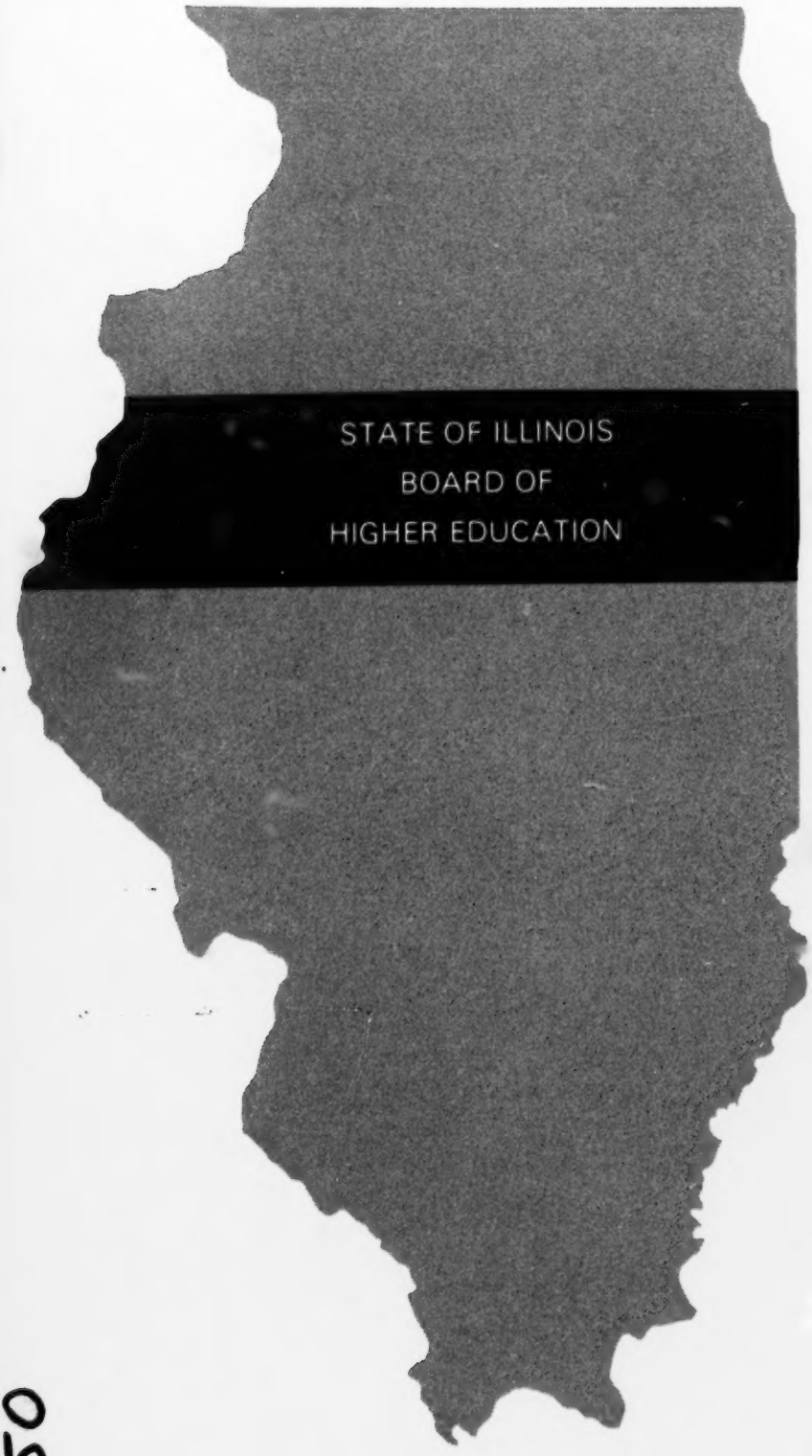
DESCRIPTORS Doctoral Degrees, *Doctoral Programs, Educational Needs, Employment Projections, *Graduate Study, Higher Education, *Master Plans, Masters Degrees, Research Opportunities, Scientific Manpower, *Social Sciences

IDENTIFIERS *Masters Programs

ABSTRACT

This report analyzes data on the current (1965-67) production of, and future need for, M.A. and Ph.D. degrees in the social sciences in Illinois. While in 1966-67 Illinois produced approximately 8% of all such degrees nationwide, in 1965-66 60% of its M.A.'s and 75% of its Ph.D.'s were graduates of nonpublic institutions, primarily the Univ. of Chicago and Northwestern Univ. The need for M.A.'s and Ph.D.'s will double between 1965 and 1980, but it is anticipated that the nonpublic universities will only be able to provide for a 33% increase. This means that existing and proposed public universities must increase their production by a factor of 3 to 4. Complicating the problem is the fact that the level of fellowship support for students in the social sciences has been and is significantly less than for students in the natural sciences. Among the recommendations to the Illinois Board of Higher Education made by Committee R is the establishment of an Institute for Social Science Research which would assist in the development and expansion of M.A. Programs in the developing universities, as well as aid in developing new Ph.D. programs and assist in achieving rapid expansion of existing Ph.D. programs. Other committee reports are: ED 012 755, ED 029 459, ED 029 465, and ED 032 245. (DJB)

ED041796



GRADUATE EDUCATION IN THE SOCIAL SCIENCES

MASTER PLAN
PHASE III
COMMITTEE

R

JUNE, 1969

SP 000150

ILLINOIS BOARD OF HIGHER EDUCATION

MEMBERS

GEORGE L. CLEMENTS, *Melrose Park, Chairman*
FRED W. HEITMANN, JR., *Glenview, Vice-Chairman*
JOSEPH L. BLOCK, *Chicago*
NORRIS L BROOKENS, M.D., *Urbana*
JOHN A. D. COOPER, M.D., *Evanston*
FRANK F. FOWLE, *Winnetka*
GEORGE S. HARRIS, *Chicago*
MRS. AUGUSTE C. HERSHEY, *Alton*
EDWARD E. LINDSAY, *Decatur*
RAY PAGE, *Springfield*
JOHN M. STALNAKER, *Evanston*
LINDELL W. STURGIS, *Metropolis*
TIMOTHY W. SWAIN, *Peoria*
W. I. TAYLOR, M.D., *Canton*
JAMES C. WORTHY, *Chicago*
MERLE M. YONTZ, *Peoria*

ALTERNATES

HOWARD W. CLEMENT, *Des Plaines*
JOHN K. COX, *Bloomington*
MELVIN C. LOCKARD, *Mattoon*
E. LELAND WEBBER, *Chicago*

STAFF

ARTHUR D. BROWNE, *Acting Executive Director*
KEITH W. SMITH, *Associate Director*

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

REPORT OF MASTER PLAN COMMITTEE

R

GRADUATE EDUCATION IN THE SOCIAL SCIENCES

A report to the BOARD of HIGHER EDUCATION for its use in developing "Master Plan, Phase III" for higher education in Illinois. This report is the work of the study committee and is NOT the work of the Board or its staff.

MEMBERS OF COMMITTEE R

Chairman
Dr. D. Gale, Johnson
The University of Chicago
Chicago, Illinois

Dr. Earl S. Beard, Dean
Division of Social Sciences
Southern Illinois University
Edwardsville, Illinois

Fr. Gabriel Brinkman, O. F. M.
Resident and Assoc. Prof.
of Sociology
Quincy College
Quincy, Illinois

Dr. Ernest Doleys
Assoc. Prof. of Psychology
De Paul University
Chicago, Illinois

Dr. Robert E. Gabler, Chm.
Dept. of Geography
Western Illinois University
Macomb, Illinois

Dr. Arlan C. Helgeson, Dean
The Graduate School
Illinois State University
Normal, Illinois

Dr. Albert L. Hunsicker, Head
Dept. of Psychology
Bradley University
Peoria, Illinois

Dr. Margaret Soderberg
Asst. Prof. of Political Science
Eastern Illinois University
Charleston, Illinois

Dr. Karl DeSchweinitz, Prof.
Dept. of Economics
Northwestern University
Evanston, Illinois

Dr. John Thompson, Head
Dept. of Geography
University of Illinois
Urbana, Illinois

Dr. Daniel Wit, Head
Dept. of Political Science
Northern Illinois University
DeKalb, Illinois

ED041796

CONTENTS

I. FINDINGS 1

II. RECOMMENDATIONS 2

III. INTRODUCTION 6

IV. QUALITY OF GRADUATE EDUCATION IN THE SOCIAL SCIENCES IN ILLINOIS 7

V. FUTURE DEMAND FOR SOCIAL SCIENTISTS 8

VI. FUTURE SUPPLY OF SOCIAL SCIENTISTS 9

VII. DOCTORAL DEGREES AWARDED AND EMPLOYMENT OF DOCTORATE RECIPIENTS IN ILLINOIS 12

VIII. DEVELOPMENT AND EXPANSION OF MASTER'S DEGREE PROGRAMS 13

IX. INSTITUTE FOR SOCIAL SCIENCE RESEARCH 15

X. EXPANSION OF GRADUATE TRAINING AT THE PH.D. LEVEL 16

XI. CONDITIONS OF EMPLOYMENT 18

- Salary and Other Compensation 18
- Teaching Loads 19
- Research Opportunities 19

XII. THE SOCIAL SCIENCES AND SOCIAL ACTION 20

XIII. INCREASING EFFICIENCY IN GRADUATE EDUCATION IN THE SOCIAL SCIENCES 22

LIST OF TABLES

1. NATIONAL RATINGS OF QUALITY OF SOCIAL SCIENCE FACULTIES IN ILLINOIS UNIVERSITIES..... 7

2. EARNED GRADUATE DEGREES IN THE SOCIAL SCIENCES, 1965–66, AND PROJECTIONS FOR 1980 BY PUBLIC AND NONPUBLIC UNIVERSITIES IN ILLINOIS..... 9

3. ILLINOIS GRADUATE ENROLLMENTS AND PROJECTIONS, 1968–69 TO 1977–78..... 10

4. ILLINOIS GRADUATE DEGREE PRODUCTION AND PROJECTIONS, 1968–69 TO 1977–78..... 10

5. 1967 ILLINOIS GRADUATE DEGREES AWARDED IN THE SOCIAL SCIENCES: BY INSTITUTIONAL CONTROL AND ACADEMIC DISCIPLINE..... 11

6. UNITED STATES HIGHER EDUCATION PROJECTIONS TO 1976–77..... 11

7. SALARY AND COMPENSATION AT BIG TEN STATE UNIVERSITIES, 1967-68..... 18

8. AVERAGE COMPENSATION AND AVERAGE SALARY AT STATE UNIVERSITIES OF ILLINOIS, NEW YORK, AND CALIFORNIA, 1967–68..... 19

I. FINDINGS

Our study of graduate education in the social sciences in Illinois indicates the following important findings:

1. Illinois is one of the nation's major sources of graduate education in the social sciences, ranking third in the nation in terms of the number of doctorates awarded in the social sciences. Approximately 8 per cent of the doctorates awarded in the social sciences in the nation were awarded in Illinois.

2. The quality of graduate education in the social sciences provided by the universities in Illinois is nationally recognized as outstanding.

3. As of the mid-sixties, the nonpublic universities in the state were the source of about three fifths of all M.A. degrees and three fourths of all Ph.D. degrees awarded in the social sciences in the state. This is a significantly higher concentration of social science graduate degrees from nonpublic institutions than is true for the nation as a whole.

4. Between 1965 and 1980, Committee R estimates that Illinois will require a doubling of the number of social scientists with advanced degrees. A large part of the increase in demand will be due to the expansion of enrollment in higher education in Illinois during the period. In most of the social science disciplines, educational institutions are the major source of employment of social scientists. In addition to the increased demand for social scientists by higher educational institutions, we expect that there will be a rapid expansion of social science research and an increase in the need for social scientists in social action programs. These increases will come because of the need for more problem-solving research and the proper evaluation of the effects of social action programs.

5. Since the resources anticipated to be available to the nonpublic universities (unless new sources are developed) will not permit an increase of more than a third in graduate enrollment in the social sciences, the public universities will need to increase enrollments at the M.A. level in 1980 to three times the 1965 number and to increase the enrollment at the Ph.D. level to four times the 1965 number.

6. The level of fellowship support for students in the social sciences has been and is significantly less than that available to students in the natural sciences.

7. Because of the criteria used by federal agencies and private foundations in providing stipend support for graduate students and financial support for research, such support for the new and expanding graduate departments in Illinois must be provided by the State of Illinois if it is to be available. This finding is not meant as a criticism of the criteria used by the national programs, whether public or private, but is presented simply as a statement of fact.

II. RECOMMENDATIONS

1. The need to double graduate education in the social sciences in fifteen years presents a problem of major magnitude. If the problem is to be solved without a significant reduction in standards of quality, it will be necessary to find solutions that will take advantage of the potentialities of all of the universities in Illinois. The effort should include:

   a. the rapid expansion of M.A. training at the newer universities,

   b. the development of additional programs at the doctoral level at both public and nonpublic universities where there is evidence that the institutions are capable of meeting the rigorous standards deemed necessary for Ph.D. programs,

   c. the provision of assistance to the established Ph.D. programs of high quality to permit these programs to expand more rapidly than would otherwise be possible, and

   d. the provision of support for social science research with particular emphasis upon problem-solving research and with an objective of aiding new and expanding programs at both the M.A. and Ph.D. levels.

2. While all universities must contribute to the increase in graduate training at the M.A. level, we recommend that particular emphasis be given to the development of new M.A. programs and expanding existing M.A. programs at the developing state universities. If high standards are to be maintained and achieved, it will be necessary to recognize:

   a. that there will have to be an increase in the faculty-student ratio to provide for the necessary faculty time required for high quality M.A. programs, including additional time for research by faculty members;

   b. that additional funds will be needed for student support, especially in the form of fellowships, scholarships, and research assistantships and that while a significant part of the additional support can be provided through teaching assistantships, both the requirements of high quality graduate and undergraduate education should limit such teaching assistantships primarily to second-year graduate students; and

   c. that an innovation in research support for the faculty of such institutions is required. One form that the innovation might take is outlined in the next recommendation.

3. We recommend that the State of Illinois establish an Institute for Social Science Research. The major purposes of the Institute would be to assist the development and expansion of M.A. programs in the developing universities and to aid in developing new Ph.D. programs and to assist in achieving rapid expansion of the Ph.D. programs that have been started in recent years. In general, the funds of the Institute would not be available to established graduate departments except as these departments provided assistance to the new and expanding programs. In addition, it is anticipated that the Institute would result in a significant increase in our understanding of social, political, and economic problems of Illinois.

   The Institute for Social Science Research would not be an agency for directly undertaking research. In addition to the functions outlined immediately below, it should (a) make inventories of and evaluate the social science research activities undertaken in the state and (b) indicate major weaknesses or gaps in the research being undertaken.

The Institute's primary responsibilities would be to assist the faculty of the various new and expanding graduate programs in undertaking significant research projects. This could be done by:

a. making grants in support of research programs and projects to be undertaken by the faculty and students of the universities, including both group and individual projects;

b. assisting research scholars from the various universities interested in similar problems to come together on a fairly regular basis;

c. providing assistance for the development of inter-university computer facilities; and

d. assisting, through providing a clearing house and financial assistance, in making available the scholarly resources of the major graduate departments to the new and expanding departments. Some of the ways that this can be done are through providing for visiting appointments and interchange of faculty members, postdoctoral fellowships, a CIC type of arrangement for graduate students in Illinois universities, creation of evaluative teams, and financing of some research projects that include faculty from the established departments.

It is not envisaged that the Institute would have a large staff of its own. It should call upon scholars in this state to assist in the evaluation of research proposals, and in the evaluation, particular emphasis might be given to ways in which the research undertaking can be improved. It should be noted at this point that the Institute should give a high priority to developing the capacity to undertake research as well as to the possible desirable outcome to a specific research project.

One of the criteria that should be given emphasis is the encouragement of problem-solving research. It is important that the developing universities gain the support of their immediate communities; it is important to the state and to each of its communities that some significant fraction of its social science research capacity be devoted to finding solutions of the major problems of the state. The Institute, by providing support and encouragement, could have a significant influence in this direction and without direct interference in the actual conduct of research.

A further important justification for the Institute is the effect that research support would have on the quality of instruction in the developing institutions. The developing institutions need an active research program in order to attract and to hold a quality faculty. The effects of improvement in faculty would be evident in both undergraduate and graduate instruction. It is quite clear from the national rankings referred to earlier that the amount of publication by faculty members is highly correlated with the reputation of a department. The reputation of the faculty is a major factor in attracting good students, both graduate and undergraduate.

Since the Institute would assist departments and scholars in more than one of the university and college systems of the state:

a. The Institute should be organized as a unit directly responsible to the Board of Higher Education.

b. Most of the funds available to the Institute should be for grants; a grant review committee should be drawn from all of the major university and college systems in the state, including membership from the nonpublic universities.

c. Although the required annual budget of the Institute may be difficult to determine, it is quite clear that a beginning annual budget of approximately $2,500,000 would be necessary to make a substantial contribution to the expansion of existing programs and the development of new graduate programs. This statement assumes, of course, that within each of the universities adequate budgets are available for faculty, staff, and general student support.

4. We recommend that additional Ph.D. programs in the social sciences be established in both public and nonpublic universities. We have concluded that the universities, both public and nonpublic, that have established Ph.D. programs will not be able to train the required number

of doctorates in the next two decades if high standards are to be maintained. Serious consideration should be given to adding new programs at universities other than the three that have the major programs now and to expanding existing programs at the other universities. However, as we have indicated throughout the report, new Ph.D. programs should not be created until adequate resources are made available for programs of high quality. It is well known that Ph.D. programs are expensive, but it is our view that the need for social scientists is great and that the social rewards from having a substantial pool from which to draw such personnel are also great.

Committee R believes that the Board of Higher Education has available to it a most appropriate mechanism for determining if a new Ph.D. program should be approved. The Commission of Scholars represents an excellent concept. It is difficult, if not impossible, to establish objective and quantitative criteria that would determine when a department is in an adequate position to offer a Ph.D. program. Criteria that are often used by various accrediting groups are almost certain to fail when applied to the approval of Ph.D. programs.

We believe that the prospects for achieving high standards in a Ph.D. program are related to the following factors:

a. The quality of the faculty as measured by actual or potential research productivity: In many cases, departments that are about to embark upon new Ph.D. programs will have a majority of relatively junior faculty members, and considerable emphasis needs to be given to the potential for research productivity rather than to past accomplishment.

b. The quality of existing and prospective students: To a much greater extent than is generally realized, the quality of a graduate program depends upon the quality of the students in the program. The department proposing a new Ph.D. program should have a potential for attracting able students.

c. The resources that are now or potentially available to support the program of advanced graduate education: Among the types of resources that should be investigated are:

1) access to libraries, computers, research and travel funds, secretarial and clerical services;

2) the nature of laboratories and related facilities, where relevant;

3) the adequacy of faculty and other resources to meet the needs of the undergraduates;

4) funds to provide adequate financial support to attract top-quality graduate students; and

5) salary and other faculty perquisites that will make it possible to hold existing faculty and to attract individuals with actual or potential outstanding scholarly ability.

It is our view that a graduate program has the greatest potential for success if it includes a small number, perhaps only two or three scholars who have been very productive and have shown real ability to guide students in research, rather than a significantly larger number of individuals of only average scholarly achievement or potential. A small nucleus that can establish and maintain high standards is very important. This conclusion also implies that it is not necessary that a department be strong in all aspects of its discipline.

The requirements that we have outlined for quality Ph.D. programs can not be evaluated by counting the number of books in a library, the number of faculty with Ph.D.'s, or the amount of laboratory space per student. They can be evaluated only by scholars that have had experience and have themselves participated in first-rate graduate programs. We believe that the Commission of Scholars provides an appropriate mechanism for making such evaluations.

5. We recommend that plans be made to provide resources for the established Ph.D. programs that will permit such programs to expand the number of students and to maintain standards at the current high levels. This means that programs must be devised that will meet the needs for both public and nonpublic universities.

Up to the present, a large fraction—clearly more than half—of the total cost of Ph.D. social science education in Illinois had been borne by nonpublic universities, assisted by the federal government, private foundations and individuals, and not by the state. This situation is changing and will continue to change in the years ahead.

The State of Illinois could decide to assist in the expansion of graduate programs by relying solely upon the state universities. It is, in fact, the case that most of the expansion will occur in such universities. However, we believe that the most effective use of the limited resources available to Illinois for the expansion of graduate education is one that will rely upon the existing resources of both nonpublic and public universities.

a. State universities: It is our view that the state universities with Ph.D. programs in the social sciences have a substantial potential for expansion while maintaining high standards. However, if expansion without lowering of standards is to be achieved, more than an enlargement of the faculty is required. In Illinois, as in other states, the state universities have provided little direct financial support for research in the social sciences, certainly much less than has been provided in the natural sciences. Most of the support for attracting and supporting students has been in the form of teaching assistantships; except for the social scientists in the agricultural experiment stations, almost no research assistantships have been available. Within a few years almost all of the graduate students in the social sciences in major universities will be receiving financial support; unless the state universities are in a position to give financial support, they will not be able to attract qualified graduate students. Thus, the task is not only that of providing roughly the same level of support per student for a larger number of students but also that of raising the average level of support.

b. Nonpublic universities: Committee R recommends that a program be established to assist the nonpublic universities to expand their graduate enrollments in the social sciences. Two suggestions are made to accomplish this:

1) Grants should be made to the nonpublic universities based on the increase in graduate enrollment compared to some base period, such as the average enrollment during the three years before the inauguration of the grant program. The size of the grant per student needs to be substantial if it is to assist the universities in expanding their enrollments. At the major nonpublic universities, the annual cost per graduate student is approximately double the tuition rate. Thus at the present time the tuition, if actually received rather than given as a scholarship, fails by about $2,000 per student from covering costs. The Committee believes that a grant rate per student of $1,000 per additional first- and second-year graduate student and $2,000 for third- and fourth-year student would provide the basis for significant further expansion in graduate enrollment. A student who remains in the Ph.D. beyond the fourth year should not be counted in making the grants. If the nonpublic universities were to increase their graduate enrollments by 750 in response to this program, the annual cost would be about $1,000,000. This is almost certainly less than half of the cost of achieving the same increase in the state universities.

2) The establishment of training programs financed by the State of Illinois, similar to the training programs funded and administered by the United States Public Health Service: The training programs, which would be available for degree programs that would result in expanding graduate enrollment, would provide for support of additional faculty and related personnel, student stipends and tuition, and some related expenses. It might be noted that the average cost per student of the federal training programs in the social sciences is in excess of $8,000. It is probable that a state program could be operated at a somewhat lower cost, but probably for not less than $6,000.

6. The establishment of a program of graduate fellowships that could be used at any university (public or nonpublic) in Illinois: If such programs were to be of any real assistance to the nonpublic universities, the fellowship should include the student stipend, plus a cost of education allowance that is at least equal to the regular tuition. Such a program might include a stipend, plus regular tuition and an additional cost of education allowance based on the extent of the increase in enrollment achieved as a result of all of the efforts of a university. This would combine some of the features of the first proposal for the nonpublic universities and a fellowship program.

III. INTRODUCTION

Graduate education in the social sciences is a major part of all graduate education in the State of Illinois. In terms of degrees awarded in Illinois in 1965–66, approximately 10 per cent of all masters' degrees and 16 per cent of all doctorates were in the social sciences. In terms of the number of doctorates in the nation, Illinois ranked third with approximately 8 per cent of all the doctorates in the social sciences having been awarded by Illinois institutions in 1966–67. Illinois also ranked third in total production of doctorates but with a slightly lower fraction of the total than in the social sciences—approximately 7 per cent for the total as compared to 8 per cent for the social sciences.

One of the features of graduate education in the social sciences in Illinois is that nonpublic institutions have traditionally been the major source of advanced degrees. In 1965–66 nonpublic institutions awarded 60 per cent of all masters' degrees and 75 per cent of all doctorates given in the social sciences in Illinois. In all areas of graduate education, as measured by degrees awarded, the public and nonpublic institutions in Illinois were of approximately equal importance. For the nation as a whole, public and nonpublic institutions are about equally important in graduate education in the social sciences.[1]

Illinois institutions confer about one twelfth of all the social science doctorates awarded in the United States. Yet we conclude that between 1965 and 1980 the number of doctorates in the social sciences must approximately double if the demand is to be met. This is a task of major magnitude.

Illinois is fortunate, indeed, that its three major graduate institutions are universities with national and international reputations for high quality. The University of Chicago, the University of Illinois, and Northwestern University have outstanding graduate programs in the social sciences as in most other fields of learning. This evaluation is evidenced by the cosmopolitan nature of the graduate students who come to them from all the states and from countries throughout the world. Members of the faculties of these three universities include some of the outstanding social scientists in the nation. Our high evaluation of the quality of the faculties in the social sciences in these institutions is fully consistent with a national evaluation survey undertaken by the American Council on Education, a survey which is briefly summarized later.

Committee R strongly urges that the efforts to expand the size of graduate programs in the social sciences should not result in a lowering of the quality of the existing major graduate programs in the social sciences. Actions taken to increase enrollment should in no way weaken the three universities. Committee R also believes that it is essential that the new graduate programs in the social sciences be of a level of quality that compares favorably with the programs in the three universities. We recognize that it will be no easy task to reach the quality of programs achieved over the years by the established graduate programs, but it would be a tragic mistake to set the objective at anything less.

[1] For the purposes of this report, the social sciences include geography and psychology as well as anthropology, economics, history, political science, sociology, and all other, including interdisciplinary programs, which are included or reported under the general classification of social science.

IV. QUALITY OF GRADUATE EDUCATION IN THE SOCIAL SCIENCES IN ILLINOIS

Not only is Illinois one of the top ranked states in terms of the numerical importance of graduate social scientists trained, but Illinois is also among the top ranked states in terms of the quality of the graduate training provided. The American Council on Education published a 1964 survey of graduate education, *An Assessment of Quality in Graduate Education.* This survey ranked graduate departments in seven social sciences. Approximately, a given science department was ranked "distinguished" if it were in the top 10 per cent of all departments in a discipline, "strong" if it were in the next 15 per cent, and "good" if it ranked in the next 20 to 25 per cent. There were three Illinois universities that received rankings in the social sciences. Of the twenty departments that were ranked, seven were ranked as "distinguished" (one in each of the seven disciplines), nine were ranked as "strong," and four as "good." Thus in each of the social science disciplines, there was one department that ranked in the upper 10 per cent of all graduate departments in the nation, and in six of the seven disciplines there was at least one other department that ranked as "strong." There were three disciplines in which all of the departments in the three universities ranked as either "distinguished" or "strong."

TABLE 1

NATIONAL RATINGS OF QUALITY OF SOCIAL SCIENCE FACULTIES IN ILLINOIS UNIVERSITIES

Area	University of Chicago	Northwestern University	University of Illinois
Anthropology	Distinguished[a]	Good[b]	N/A[c]
Economics	Distinguished	Strong[d]	Good
Geography	Distinguished	Strong	Good
History	Distinguished	Strong	Strong
Political Sc.	Distinguished	Strong	Strong
Sociology	Distinguished	Strong	Good
Psychology	Strong	Strong	Distinguished

[a]A "Distinguished" department ranks in the top 10 per cent in its discipline.
[b]A "Strong" department ranks in 11 - 25 per cent.
[c]Department just recently established.
[d]A "Good" department ranks in the next 20 to 25 per cent.

Source: An Assessment of Quality in Graduate Education, The American Council on Education, 1966.

The primary tasks facing Illinois are to increase significantly the scale of graduate education in the social sciences and at the same time maintain the quality of that education. Illinois can be justifiably proud of what it has achieved up to this point in providing opportunities that are the equal of those available in any state for graduate education in the social sciences. As we look to the future, it is important that we not sacrifice quality in order to achieve greater numbers. But the Committee is convinced that it will not be necessary to do so if adequate resources are made available.

V. FUTURE DEMAND FOR SOCIAL SCIENTISTS

Based on the information available to Committee R, we have concluded that the future demand for social scientists in Illinois will depend to a very considerable degree upon the growth of higher education in the state. The following data collected by the National Academy of Sciences in 1966–67 show that a large majority of all recipients of the doctorate in the social sciences take their first job with educational institutions.

Psychology	62
Anthropology	90
Sociology	89
Economics	74
Political Science	82
History	93

While comparable data are not available for the State of Illinois, it is the clear impression of the members of the Committee that the experience of doctorate recipients from Illinois institutions indicates that at least as large a proportion accept positions with educational institutions.

Much less information is available concerning the recipients of masters' degrees. In fact, there appear to be little data on the career directions for master's degree recipients.

Information provided by the University of Chicago indicated that in all fields of the social sciences 86 per cent of the M.A. recipients in 1967–68 either continued their graduate study or took positions in education. Of those who did not continue graduate study, 65 per cent went into some aspect of education. Bradley University indicated that during the past four years M.A. recipients in psychology either continued graduate study (30%); entered into some aspects of education, either as teachers or as school psychologists (20%); or entered clinical practice (48%). Of those who went into clinical practice, most found employment in state hospitals or in some aspect of mental health. Rather less complete data from other universities indicate that teaching or further graduate study accounted for the activity of 50 to 70 per cent of M.A. recipients.

Among the educational institutions that will require substantially more social scientists by 1980 are the colleges and universities. It has been estimated that the number of students enrolled in institutions of higher education in Illinois will increase from 305,000 to 681,000 between 1965 and 1980. This represents more than a doubling of enrollment in a fifteen-year period. If there is no change in the relative emphasis upon the social sciences in colleges and universities, doubling of enrollment would require a doubling of the number of social scientists on the faculties of colleges and universities in the state.

It has also been estimated that the number of graduate students in Illinois would double within the same period of time. If the demand for social scientists by employers other than colleges and universities increases at the same rate as does the estimated demand by colleges and universities, doubling the number of graduate students in the social sciences should be adequate to meet the demand. The Committee believes that this is a reasonable expectation. One component of the demand for social scientists—teaching in secondary schools—is likely to increase more slowly than the openings in colleges and universities; however, this component is the source of employment for only a small fraction of the M.A.'s in the social sciences and almost none of the Ph.D's.

In 1966 public elementary and secondary school enrollments for Illinois were 1,409,450 pupils and 749,330 pupils, respectively, for a total of 2,158,780 pupils. It is estimated that 80 per cent of the 5–17 age group will be enrolled in the public schools. As the size of this group increases, the public school enrollment is projected to increase proportionately.[2] An enrollment of 2,528,000 is projected for Illinois public schools alone in 1980.[3] This represents a 17 per cent increase in public school enrollments. Projections for all higher levels of education will reflect a larger increase based on a greater percentage of each age cohort going on to succeeding higher levels.

However, other types of employment opportunity for social scientists are likely to increase more rapidly than college and university teaching. These opportunities will be in the growing number of research institutions, governmental and private agencies dealing with social problems, and private industry.

[2] "Education for the Future of Illinois," a report of the Task Force on Education, State of Illinois, 1966, pp. 144–145.

[3] 1975 projection is 2,352,000.

VI. FUTURE SUPPLY OF SOCIAL SCIENTISTS

As indicated earlier, projections have been made to indicate that graduate enrollments in Illinois would increase by 100 per cent between 1965 and 1980. It is not unreasonable to assume that graduate enrollments in the social sciences would increase by the same order of magnitude. Nationally the number of doctorates awarded in the social sciences has been approximately a fifth of all doctorates for the past half century, and there has been no significant change in the percentage.

It will not be an easy task to accommodate twice the number of graduate students in all fields in Illinois by 1980; it may be even more difficult to achieve a doubling in the social sciences than in all fields. As noted earlier, in all fields of graduate study, nonpublic and public universities have approximately equal roles. However, in the social sciences the nonpublic institutions are now awarding about three fifths of all masters' degrees and three fourths of all doctorates. In fact, most of the masters' and virtually all of the doctorates awarded in the social sciences in nonpublic universities are awarded by two universities. It is highly improbable that if recent trends continue, the nonpublic universities can increase their graduate enrollments by 100 per cent between 1965 and 1980. In fact, unless major new resources become available, it is improbable that these two universities can increase graduate enrollments in the social sciences by more than a third (33%) in that period of time. This would mean that in 1980 public institutions would need to have graduate enrollments at the master's level more than three times the number of 1965 and at the doctorate level almost four times the 1965 number (see Tables 2–6). Even if the nonpublic universities could increase their graduate enrollments by half, graduate level enrollments in public universities in 1980 would have to be more than three times the 1965 level.

TABLE 2

EARNED GRADUATE DEGREES IN THE SOCIAL SCIENCES, 1965-66, AND PROJECTIONS FOR 1980 BY PUBLIC AND NONPUBLIC UNIVERSITIES IN ILLINOIS

	1965-66 (1)	1980 (2)	(2)/(1)[a]
M.A.			
Public	330	1080	3.25
Nonpublic	489	760	1.33
Total	819	1840	2.00
Ph.D.			
Public	52	205	3.96
Nonpublic	153	205	1.33
Total	205	410	2.00

[a]Assumes nonpublic universities increase graduate enrollment and earned degrees by 33 per cent. Total graduate enrollment in the social sciences in 1965-66 was approximately 3,500 of which 60 per cent of the total and a large fraction of the full-time students were in the nonpublic universities.

TABLE 3

ILLINOIS GRADUATE ENROLLMENTS AND PROJECTIONS, 1968-69 to 1977-78

Categories	Public Universities		Nonpublic Universities		All Illinois Universities	
	Established	Developing	Established	Developing	Established	Developing
In-state Enrollment	7,839	10,943	(868)[a]	(5,900)	(8,707)	(16,843)
Out-of-state Enrollment	6,094	496	(3,132)	(821)	(9,226)	(1,317)
Total Graduate Enrollment	13,933	11,439	8,740	8,421	22,673	19,860
Full-time Students	7,569	1,049	5,580	2,357	13,149	(3,406)
Part-time Students	6,364	10,390	3,160	4,364	9,524	(14,754)
Total 1968-69 Enrollment	13,933	11,439	8,740	8,421	22,673	19,860
Projected 1977-78 Enrollment	25,606	30,185	10,800	10,474	36,406	40,659

[a]Parentheses indicate incomplete data; information not available.

TABLE 4

ILLINOIS GRADUATE DEGREE PRODUCTION AND PROJECTIONS, 1968-69 to 1977-78

Categories	Public Universities Degree Production				Nonpublic Universities Degree Production				All Illinois Universities Degree Production			
	Established		Developing		Established		Developing		Established		Developing	
	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.
Total 1968-69 Degrees	3474	685	2196	48	1840	620	1522	205	5314	1305	3718	253
Projected 1977-78 Degrees	6747	1324	6374	195	2218	834	2077	429	8965	2158	8451	624
Increase 1968 to 1977	94%	93%	190%	306%	21%	35%	36%	109%	69%	65%	127%	147%

The increase in the number of individuals trained through the master's level can probably be achieved more readily than can the increase in Ph.D. training. The developing state universities and colleges and the University of Illinois, Chicago Circle Campus, can significantly increase the number of graduate students trained at the M.A. level if adequate resources are made available.[4] The two new universities that have been authorized (in Sangamon and Cook counties) will offer graduate study to the M.A. Later we offer suggestions of some steps that might be taken to assure high-quality graduate study in the developing institutions and at the same time improve both their undergraduate programs and their service to the community.

[4] The institutions referred to are members of the following: Board of Governors of State Colleges and Universities; Board of Regents, Regency Universities; and Trustees of Southern Illinois University.

TABLE 5

1967 ILLINOIS GRADUATE DEGREES AWARDED IN THE SOCIAL SCIENCES:
BY INSTITUTIONAL CONTROL AND ACADEMIC DISCIPLINE

	Public Universities Degree Production				Nonpublic Universities Degree Production				All Illinois Universities Degree Production			
	2 Established		6 Developing		2 Established		4 Developing		4 Established		10 Developing	
Disciplines	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.	M.A.	Ph.D.
Geography	21	5	28		12	7			33	12	28	
Psychology (incl. Human Development)	57	38	8		17	30	23	50	74	68	81	50
General Social Science	34	1	14		8				42	1	14	
Anthropology	3	1			20	19			23	20		
Economics	33	20	9		70	28	9		103	48	18	
History	51	13	67	1	107	29	42		158	42	109	1
Political Science	41	9	17		63	21			104	30	17	
Sociology	12	6	2		47	15	34	3	59	21	36	3
Total Degrees	252	93	145	1	149	344	158	53	596	242	303	54

TABLE 6

UNITED STATES HIGHER EDUCATION PROJECTIONS TO 1976-77

	1966-67	1976-77	Percentage Increase
Staff:			
Instruction	541,000	777,000	43.6
Administration	76,000	109,000	43.4
Research	84,000	120,000	42.8
Total	701,000	1,006,000	43.5
Enrollment:			
Total Degree Credit	5,947,000	9,398,000	58.0
Nondegree Credit	443,000	710,000	60.3
4-year Institution	4,995,000	7,714,000	54.4
2-year Institution	952,000	1,685,000	77.0
Graduate	630,000	1,140,000	81.0
Undergraduate	5,317,000	8,259,000	55.3

Source: U. S. Office of Education

However, the problem of increasing the enrollment in Ph.D. programs is a much more forbidding one if most of the responsibility is to be accepted by public institutions. As indicated above, if the nonpublic institutions increase the number of doctorates awarded by a third between 1965 and 1980, the public institutions would have to award four times (400%) as many doctorates in 1980 as in 1965.

VII. DOCTORAL DEGREES AWARDED AND EMPLOYMENT OF DOCTORATE RECIPIENTS IN ILLINOIS

Separate data are not available to permit an estimate of the relationship between the number of doctorates in the social sciences awarded in Illinois and the number of individuals with doctorates who accept positions in Illinois. Such data do exist for 1960–66 for all fields. These data indicate that there were 6,959 individuals who received their doctorate in Illinois and 3,752 individuals who were known to take their first postdoctoral positions in the state. The discrepancy of 3,207 is larger than the real discrepancy since the locations of the first postdoctoral positions of 1,074 individuals receiving the doctorate were unknown. In addition, 604 individuals had first postdoctoral positions in foreign countries; this compares to 1,106 individuals who had come to Illinois universities for doctoral work from foreign countries. A more reasonable comparison would be between the 5,271 individuals who took their first postdoctoral positions in the United States and for whom data on the state of first postdoctoral positions is known and 3,752—the known number of individuals who took their first postdoctoral positions in Illinois. The difference is 1,519 or about 30 per cent of the adjusted base.

One further statistical comparison may be of interest. The 3,752 individuals with doctorates who took their first postdoctoral positions in Illinois include 1,606 individuals who had received their doctorate in Illinois, and the remainder came to the state from graduate institutions in other states.

It is not too surprising that many who obtain their doctorates in Illinois take positions elsewhere. The graduate students at the three major universities, and especially at the two nonpublic universities, come from elsewhere. In fact, of the 6,959 individuals who received their doctorates in Illinois in 1960–66, only 1,954 had received their baccalaureate degrees in Illinois. The state origins of the baccalaureates for others receiving the doctorate in Illinois include:

New York	412	Wisconsin	192
Ohio	318	Minnesota	135
Indiana	233	Iowa	109
California	180	Missouri	176
Michigan	220	Texas	111
Massachusetts	248	38 Other States	1,565

These are in addition to the 1,106 individuals who earned their baccalaureates in foreign countries.

It is possible to argue that the need to expand graduate study in the social sciences in Illinois is reduced by the current probable excess of doctorates awarded and the number with doctorates who accept positions in Illinois. However, further consideration indicates that this is not a realistic position. First, the needs of Illinois cannot be considered independently of the national needs. A significant fraction of the costs of graduate education, including research, is paid from federal funds. Only three other states received more than the $189 million received by universities in Illinois in 1965–66. Of this total, $125 million was received by three universities—University of Illinois, University of Chicago, and Northwestern University. Of the remainder, $17.3 million went to Loyola University and Southern Illinois University.

Second, if the State of Illinois depended entirely on the public universities for the production of doctorates, it might have a deficit in meeting its demand for individuals with the doctorate. In one sense it can be said that the surplus of the doctorates is due to the activities of the nonpublic universities. This statement may not be valid, however, since the nonpublic universities are an important source of demand for individuals with the doctorate. The demand by the nonpublic universities for individuals with the doctorate may approximate the net annual inflow of 150 for the period from 1960–66. However, it is important to remember that it is the nonpublic universities, and not the state universities, that are responsible for the substantially greater production of doctorates than were employed in Illinois. It is the opinion of the Committee that the graduate programs, and the research associated with those programs, constitute a major asset to the State of Illinois.

VIII. DEVELOPMENT AND EXPANSION OF MASTER'S DEGREE PROGRAMS

It is clear that if the demand for social scientists with training at the master's level is to be met in the years ahead, a number of new programs of education must be developed, and existing programs of the developing institutions must be enlarged. The universities that now provide most of the graduate training in Illinois can not undertake this task as well as that of providing the greatly increased number of Ph.D. degrees. It is possible that the demand for more doctorates may reduce the number of masters' candidates accepted by the major graduate departments. There is an increasing tendency for graduate departments in the larger universities to specialize on the Ph.D. graduate program and to limit the number of individuals accepted for master's work. If this trend should continue, a very large fraction of the master's work would have to be done outside the universities now providing most of the Ph.D. training.

It is the Committee's conclusion that if the appropriate steps are taken, quality M.A. programs can be established and/or enlarged at the developing state universities. But to do so will require at least the following steps:

1. an increase in faculty size more than proportionate to the increase in total enrollment since the faculty-student ratio is necessarily larger for education at the master's level than at the undergraduate level,

2. a very substantial increase in student financial support to permit the institutions to attract good students, and

3. innovations in the provision of research support in the social sciences to make it possible to attract and to hold first-rate faculty and to provide the required training facilities for good quality graduate education.

The first two of the requirements are widely acknowledged, even if somewhat expensive. It may be noted that compared to students in the physical and biological sciences, students in the social sciences receive significantly less fellowship and assistantship support. The federal government has concentrated a relatively large portion of its fellowship support in the natural sciences. While there has been some shift in the emphasis in federal support in recent years, it is still true that in a university in which almost all of the graduate students in the natural sciences are receiving full financial support, only a little more than half of the graduate students in the social sciences have any form of financial assistance. Thus the expansion of graduate education in the social sciences will require an increase in support for social science students greater than the increase in the number of students enrolled. If the social sciences are to grow to meet the anticipated demand, a larger fraction of the graduate students must be provided with adequate financial support.

Public universities have done relatively little to support research in the social sciences. Much of the support for social science research has come from sources outside the universities in terms of grants from private foundations and the federal government. Compared to the funds available for the natural sciences, the funds from outside sources have been extremely modest.

While the established graduate social science departments in Illinois have had considerable success in obtaining financial support from foundations and the federal government, there is little likelihood that the newly created graduate programs in the universities will be able to obtain such financial support in the near future. For one thing, the three major private foundations are not now providing significant support for basic social science research at universities. For the present, the only relevant point is that the new graduate departments are most unlikely to obtain support for research from private foundations. Nor does it appear that the federal government will be a major source of support for research in these departments over the next decade. Federal support of social science research, since much of it is distributed on a competitive basis, goes largely to a small number of universities. This situation is likely to be maintained for some time to come.

Three other points may be made to avoid possible misunderstanding. First, in presenting the argument for an extensive development of programs for master's education, we are not advocating programs exclusively or primarily for students who view the M.A. degree as the terminal degree. In other words, the program for M.A. education should provide the quality and the breadth of education that will permit those recipients of the M.A. who wish to continue their graduate work to do so without difficulty.

Second, as developing universities expand, some of them may well acquire sufficient strength and breadth of faculty to warrant consideration of additional Ph.D. programs in certain disciplines. There is no intention in our recommendations to preclude this. In fact, if this should occur, we feel that it would confirm the success of the efforts to establish new masters' programs. Nor do we intend to preclude the creation of a degree between the M.A. and the Ph.D. In the years ahead the demand for a degree of this nature is likely to increase, and it might well be that offering such a degree would be a suitable first step toward the development of a Ph.D. program.

Third, by our emphasis in this and in a later section of this report on the application of social science research for problem understanding and solving, we do not want to leave the impression that the current diversity among the disciplines and within disciplines should be reduced. Much of the current research support for the social sciences is for what has become known as the behavioral sciences, while the more humanistic aspects of the social sciences have been largely ignored. Very little support has been provided for history or for the nonquantitative aspects of political science. It would be highly desirable if some of the present imbalance could be ameliorated.

IX. INSTITUTE FOR SOCIAL SCIENCE RESEARCH

If the new graduate departments are to have adequate research support, it must be provided by the State of Illinois for at least a period of years. There are two main ways of providing such support. One is to include funds for research support for the social sciences in the budgets of each of the universities. The other is to create a Social Science Research Institute for the State of Illinois, which would have as one of its primary responsibilities the strengthening of the research potential and productivity in the universities in the state. The Research Institute would also have as its responsibility the support of social science research for the contribution that such research could make to the welfare of the people of the state.

Probably both forms of support should be made available. Each graduate department should have some funds for research assistants and modest funds for other costs, such as travel, secretaries, and equipment. But this form of support need not be very large if there existed a social science institute that had the responsibility for funding and supervising the larger scale research projects.

It is not envisaged that the Institute would have a large staff of its own; if it did, it could not contribute significantly to development of social science research in the new graduate departments. Quite briefly, the Institute would (1) make grants in support of research programs and projects to be undertaken by the faculty and students of the universities, including both group and individual projects; (2) attempt to inventory and to evaluate the social science research activities undertaken in the state; (3) have the responsibility for indicating major weaknesses or gaps in the research being undertaken; (4) assist research scholars from the various universities interested in similar problems in coming together on a fairly regular basis; and (5) assist in the development of interuniversity computer facilities for social science research activities.

The Institute could be a significant asset in obtaining support from federal agencies for the research and education programs in the developing universities. In disciplines or research areas where no one department or university had sufficient academic resources to attract federal support, the combined strengths of two or more universities, in addition to the possibilities of collaboration with the major universities where desirable, would make it possible to present a strong case.

One of the important contributions the Institute could make to the strengthening of the new graduate departments would be to provide salary support for faculty during the summer. This is an important element in recruiting and retaining faculty and in contributing to the development of younger faculty members who, in the absence of such support, frequently accept positions during the summer that make no contribution to their long-run development as scholars.

While the responsibility of the Committee is for graduate education in the social sciences, it is appropriate to note that there will continue to be social science departments that will not offer graduate programs. If these departments are to continue as major sources of graduate students, their needs for research support should not be neglected. An important role that could be filled by the Institute would be to seek out opportunities for assisting faculty in such departments, either through direct grants or by arranging for cooperative research projects that would involve them.

It would be highly desirable if the resources of the Institute would be available to the nonpublic universities that provide training at the master's level but little or none at the Ph.D. level. The Institute should also make its resources available to departments developing Ph.D. programs. Such support could be very important to these departments, both directly and indirectly, through making it possible to attract financial support from federal agencies and private sources. It is not anticipated that the Institute would provide support for the major social science graduate departments unless such departments were the only source of the relevant scholarly resources for carrying out a high-priority research program and were jointly involved in a cooperative effort with the newer departments.

X. EXPANSION OF GRADUATE TRAINING AT THE PH.D. LEVEL

As noted earlier almost three fourths of the Ph.D. degrees awarded during 1965–66 in the social sciences by Illinois institutions were awarded by nonpublic institutions. If the number of social scientists receiving the Ph.D. in Illinois is to double by 1980 (an increase from about 205 to 410 annually), the public universities will probably have to increase their Ph.D. programs by three-fold unless the nonpublic universities increase their programs substantially more than is now envisaged by those institutions.[5] An additional expansion by the nonpublic universities will require additional resources, not only for student support but also for operating and capital costs. The additional support would have to come from sources not now available to these institutions.

Up to the present time only three Illinois public universities have awarded Ph.D. degrees in the social sciences—the University of Illinois, Southern Illinois University, and Northern Illinois University. Because of the length of time required to establish Ph.D. programs, most of the absolute increase in the number of Ph.D. degrees awarded in the social sciences will have to be by the University of Illinois and Southern Illinois University, although by 1980 Northern Illinois University could be making a significant contribution to the number of Ph.D. degrees.

The task of increasing the Ph.D. program in the public universities by three-fold in fifteen years is a very difficult one. If the primary emphasis is upon increasing numbers, the task would be much less difficult than if the maintenance or improvement of the quality of the graduate programs were given a high priority. One of the main concerns of the Committee is that in the effort to meet the rapidly growing demand in so short a period of time there will be a reduction in the "average quality" of the Ph.D. degree awarded in the social sciences in Illinois. It needs to be remembered that the national rankings of the quality of faculties in the social sciences referred to earlier indicated that the highest average ranking was given to the University of Chicago and Northwestern University, and it is these universities which will be able to expand their graduate programs by relatively little.

The expansion of Ph.D. programs at the University of Illinois should be achieved while maintaining the quality of the very good graduate programs of that university. To achieve this result will require that the University of Illinois be provided with the necessary resources.

It should be recognized that the quality of the new and very rapidly expanding Ph.D. programs (at least as perceived nationally by colleagues in the social sciences) will be below that now achieved at the University of Illinois for several years. These problems are in no way unique to Illinois. In all states, the new and expanding Ph.D. programs have generally failed to come up to the quality and reputation of the state university. Differences in library resources, the lingering effects of prior reputation, generally higher faculty salaries, and the quality of students attracted to established programs all operate to make it difficult for new and rapidly expanding graduate programs to achieve comparable levels of quality quickly. But the Committee believes that the problem is one that must be faced squarely and that if it is, it can be solved.

If the new and rapidly expanding Ph.D. programs are to move with reasonable speed to national recognition as quality programs, certain steps are required. Perhaps the most important step is that the approval of a new program or the acceptance of a commitment to expand rapidly an existing Ph.D. program carries with it an understanding that the necessary resources must be made available. This may well require some limitation on the number of new programs that can be approved in any one year. Conditions should be created that will be attractive to faculty and to students. The Committee believes that the importance of attractive and effective working conditions for graduate students should not be underestimated. This belief implies the provision of quiet and efficient working space for advanced graduate students, adequate laboratories for the disciplines requiring access to laboratories, stipends competitive with those available at major uni-

[5] If the nonpublic universities increase the number of Ph.D. degrees awarded by one third, these universities will be awarding about 205 degrees in 1980. This means that the public universities would have to increase the number of Ph.D. degrees awarded from 52 in 1965–66 to 205 in 1980. However, there has apparently been a significant increase in the number of Ph.D. degrees awarded by the public universities between 1965–66 and 1967–68 (see Tables 4 and 5).

versities, and support for research projects undertaken by graduate students. It is quite clear that the quality of the graduate students is at least as important to the quality of a Ph.D. program as is the quality of the faculty.

If the burden for doubling the Ph.D.'s in the social sciences granted by the graduate schools in Illinois by 1980 must fall mainly on state institutions, then it is extremely important that they be able to attract and to retain faculty of the highest quality. They must recruit young Ph.D.'s not only from the graduate schools in Illinois but also from the top-ranking graduate schools around the country. This necessarily means that careful attention must be given to the reward structure of state schools in Illinois relative to schools outside the state. The academic market place is highly competitive; and state, indeed national, boundaries are no deterrent to mobility. As in any competitive market, no one can rest on past successes. If schools outside of Illinois improve their reward structure, then Illinois must meet these standards. Otherwise its export surplus of new Ph.D.'s will rise, and established faculty members will start to leave the state. But if the state wishes to improve its educational performance at the graduate level, it can not simply adapt to competitive pressures generated outside Illinois; it must use these pressures aggressively to secure a larger share of the social scientists that enter the market each year.

A new Ph.D. evaluating employment opportunities in the universities is likely to consider the following factors: (1) salary and other monetary compensation, (2) teaching loads, (3) research opportunities, (4) conditions of and prospects for promotion, and (5) participation in department policy decisions. Of these factors, the first three are most important; and the Committee will confine its report to them.

XI. CONDITIONS OF EMPLOYMENT

Salary and Other Compensation

The data in the following tables are drawn from the report of the American Association of University Professors (AAUP) on "The Economic Status of the Profession, 1967–68."

TABLE 7

SALARY AND COMPENSATION AT BIG TEN
STATE UNIVERSITIES
1967-68

Average Compensation		Average Salary	
1. Michigan	15,573	1. Michigan	13,682
2. Iowa	14,526	2. Iowa	12,789
3. Purdue	14,416	3. Ohio State	12,728
4. Ohio State	14,192	4. Illinois	12,541
5. Indiana	13,948	5. Purdue	12,331
6. Illinois	13,831	6. Michigan State	12,291
7. Michigan State	13,811	7. Wisconsin	12,177
8. Minnesota	13,684	8. Minnesota	12,079
9. Wisconsin	13,286	9. Indiana	11,973

These figures are very gross. In the universities, however, the structure of salaries as among the various divisions is likely to be similar, and one may therefore take these figures as at least a crude index of salary differences in the social sciences. The difference between the University of Illinois' ranking in average compensation and average salary presumably is attributable to the relative weakness of its retirement program.

The Committee has selected for comparison, with Illinois, other state universities that it believes Illinois must compete with if it is going to have any chance of expanding Ph.D. programs in the social sciences while maintaining high academic standards. Had the Committee compared compensation in the Illinois schools with compensation, for example, in the University of North Dakota, the University of Idaho, and the University of Mississippi, it would have come off very well indeed. But the Ph.D.'s Illinois needs to attract to its graduate schools look at reward structures in Illinois relative to the Big Ten Schools, the universities in California, and other schools of their quality. Particularly notable are the salaries and compensation at the New York schools, because that system is quite new and is confronting problems similar to NIU, WIU, and the other universities in the state that have only recently entered upon graduate programs. These data speak for themselves. To put it bluntly, it is unlikely that the young Ph.D. from Yale University will choose EIU over the State University of New York at Binghamton if salary is his first consideration.

TABLE 8

AVERAGE COMPENSATION AND AVERAGE SALARY AT STATE UNIVERSITIES OF ILLINOIS, NEW YORK, AND CALIFORNIA, 1967-68

	Average Compensation	Average Salary	Av. Comp. Ass't Prof.[a]	Av. Comp. Prof.[a]
University of Ill.	13,831	12,541	A(10,290)	B(16,310)
Southern Ill. Univ.	12,189	11,047	A	B
Western Ill. Univ.	11,432	10,344	A	B
Northern Ill. Univ.	11,971	10,838	A	B
Eastern Ill. Univ.	12,248	11,085	A	B
Illinois State Univ.	11,803	10,681	A	C(13,160)
State Univ. of N.Y.				
at Albany	14,523	12,429	A	B
at Buffalo	15,206	13,017	AA(11,610)	A(20,560)
at Stony Brook	14,399	12,338	AA	A
Univ. of Cal.[b]	14,750	13,142	A	A

[a]The AAUP rating scale ranges from the highest AA to the lowest F.
[b]Includes all the campuses of the University of California, but excludes some of the professional schools.

Teaching Loads

In the top universities in the country, teaching loads seldom are more than 4–5 quarter courses (or seminars) or 3–4 semester courses per academic year and usually are less. Heavy teaching loads prevent the performance of the research responsibility of the university and at the same time insure poor teaching. Moreover, graduate training is labor intensive, involving many contact hours with individual students. The commitment to graduate education, therefore, is also a commitment to the reduction of course teaching loads. The need for close faculty supervision of dissertation research does not mean that graduate faculties teach less than undergraduate faculties but that the method of much of the teaching is different.

Research Opportunities

Research opportunities are not simply a function of library resources, research assistants, computers, and travel allowances. They also depend critically on a community of scholars where one can maintain a dialogue with men who have the interest, expertise, and understanding necessary for challenging and making emendations in one's ideas, hypotheses, and research plans. All these conditions are difficult to attain simultaneously, especially because there has to be some minimum-sized faculty gathered together before an "internal reinforcement effect" begins to bear fruit in research. It is this problem that makes the Committee's recommendation for a social science research institute relevant to the reward structure essential for attracting good faculty to Illinois. What is difficult for one university to do by itself may be less difficult for several universities acting in concert. A social science research institute would give the faculty of the new universities systematic contact with the faculties of the established universities. It would be an important means of assuring a new faculty member coming to WIU or ISU that he was not losing contact with his specialized field of research.

XII. THE SOCIAL SCIENCES AND SOCIAL ACTION

Universities and colleges are more than institutions providing education for their students. Universities and colleges are integral parts of specific cities and communities as well as citizens of Illinois and the United States. While the primary purposes for the existence of colleges and universities have been and presumably will continue to be the search for knowledge and the provision for the education of students enrolled in such institutions, higher educational institutions have long engaged in other activities. Extension education, university presses, public lectures, conferences, and the use of radio and television are some of the ways by which the resources of colleges and universities have been made available to a population other than enrolled students.

Except for the long tradition of the agricultural experiment stations and the agricultural extension services, universities have not accepted long-term responsibility for the research and adult education concerned with the needs of a major component of the public at large. These two institutions, operating within the colleges of agriculture of land grant universities, have made significant contributions to the solution of many problems.

Although nothing comparable to the experiment stations and extension service have been developed as a means of serving the interests of other sectors of our society, the federal, state, and local governments, as well as private organizations, are now more frequently turning to universities for assistance in meeting a wide range of problems. It can not be said that the greatly increased flow of federal funds for the support of research in universities has significantly increased the ability of universities to respond to the many requests made of them for assistance in finding solutions to a host of communal problems. This conclusion in no way implies that the funds have not been effectively utilized. Except in the health field, the main objective of the research support has not been to find solutions to current problems but to advance the various scientific disciplines that have been supported. Yet the availability of such large sums of money has clearly resulted in the expectation that universities should be able to devote a significant amount of their resources to meet the needs of a given community.

The question of the role of universities and colleges in serving community interests is particularly important to social scientists at this time. For example, the rise in the level of public consciousness of what is now loosely defined as "the urban problem" has resulted in numerous queries about the relevance of the social sciences in finding solutions to the wide range of issues included within it. Many urban areas are faced with serious problems clearly related to the subject matter of one or more of the social science disciplines—education, poverty, housing, mental health, crime, divorce, unemployment, traffic congestion, air and water pollution, racial discrimination.

Universities located in smaller cities are confronted with similar expectations and opportunities, although the particular content of problems may differ. The decline of the farm population and small towns; the problems of providing adequate public services as population densities change; the social, political, and economic problems created by plant locations in rural communities; and the possibilities of *regional development* present issues that are as crucial to smaller cities and rural areas as are the urban problems to the large cities. Universities located in the smaller cities can contribute significantly to intelligent discussion and action if appropriate means and resources are available.

Numerous requests are being received by universities that they accept roles and functions unfamiliar to them. Many of these requests would involve the participation of faculty in the social sciences (as well as other faculty) in actual operation of programs, in research to design new or improved means of solving problems, or in the evaluation of ongoing action programs, such as a job training program.

Above all else, it is important that social action be based on information gained through careful research and study rather than on vague, visceral reaction to the "wrongs" or social ills present in our society. The social scientist is the catalyst for responsible social change rather than for violence.

How should the social scientists on the faculties of colleges and universities respond to the new expectations? While it is not possible to specify definitely what should be the response in all situations, the

Committee believes that some general guidelines can be established. The Committee believes that colleges and universities have certain special and unique characteristics and particular strengths and weaknesses that must be recognized as having a strong influence upon the appropriate degree of involvement of faculty in social-action programs. These special and unique characteristics result primarily from the responsibility and the opportunity for individual faculty members to search for knowledge, as each sees it, and to transmit the knowledge to students, to other scholars, and, where appropriate, to the public generally.

The basis for this characteristic of universities and colleges is not that it makes the life of faculty members more pleasant and rewarding, but that such freedom results in the long-run benefit of a democratic society. The university is the one social institution that has the primary responsibility to search for knowledge, regardless of the immediate or long-run consequences. Other social institutions have other primary objectives. Political institutions, for example, have specific programs that must be supported, at least in public, until a decision is reached to change the programs. Political institutions and universities are both necessary elements in a democracy. Thus the contrast of objectives is not meant to denigrate one and to glorify the other.

But it does follow from the special characteristics and objectives that universities are severally limited in their abilities to respond to requests to take on operating responsibilities for action programs. We believe that universities can operate action programs on an experimental basis as a means of trying to find new and better ways of solving social problems. But if the experiment meets with some degree of success, it should be taken over by another institution which is better fitted to undertake large-scale administrative responsibilities. If the experiment is a failure, it should, of course, be dropped. But it is not only the limitations of universities as administrative agencies that call for caution in their permanently undertaking action programs. There are other important reasons. First, an action program must be responsive to the society that it serves; it must be subject to change—including abandonment as objectives and values change. It must, in other words, be subject to change for reasons other than the primary reason for which the university undertook it in the first place—to increase understanding of how a program functions and operates to change the situation in which it operates. Second, the basis of the concept of academic freedom is that the individual faculty member, not his colleagues or university administrators, is the only person responsible for his views. A university does not have, and can not have, a collective view of the truth or of the validity of a factual or theoretical hypothesis or conclusion. If a university were to take long-run responsibility for a given action program, it would find itself in the position of promulgating a specific set of theories and evaluations of its actions. Either it would have to suppress dissenting views about the validity of its actions, or it would soon find the acceptance of its approach being undermined by members of its own faculty. Third, universities do not have the human resources to permit them to operate large-scale action programs. Universities could, of course, employ the necessary personnel to undertake such functions; but if they did do so, they would soon find that such operations would overshadow the primary activities of the university.

But the social scientists on university faculties can not, and in the view of the Committee should not, ignore the possible contribution that social science can make to the solution of social problems. The creation and participation in the conduct of experimental programs, which if successful and acceptable are taken over by other institutions, is one approach that may be appropriate in some instances. Social scientists can also assist community groups or governments in designing and articulating their programs, including giving emphasis to appropriate methods of evaluating the results. It is remarkable, but true, that the effects of social-action programs are seldom objectively determined and evaluated in terms of the original objectives of the programs.

The most important contribution that social scientists in the universities can make to solutions of social problems still seems to lie in the general area of increasing our knowledge of the society in which we live. This is not a plea for an ivory tower to which the social scientists can retreat and ignore what is going on around them. But if social scientists are to undertake the research which is relevant to the solution of social problems, the resources for undertaking such research must be made available. The model of the agricultural experiment stations may be quite appropriate, although it is clear that if major gains are to be achieved, the model should be generalized and available for many universities rather than being concentrated in one in each state.

XIII. INCREASING EFFICIENCY IN GRADUATE EDUCATION IN THE SOCIAL SCIENCES

Graduate education in the social sciences is expensive and likely to become more expensive in the years ahead. The fact that the cost per student is substantially below the cost in the natural sciences is small comfort, although worth noting.

Some of the apparent increase in the cost of graduate education in the social sciences as conventionally measured in terms of the cost per student per year or degrees awarded is spurious. Such evidence assumes that the same product is being delivered today as twenty or forty years ago. It is our clear impression that the average quality of the training of the Ph.D. recipient today is significantly higher than it was two, three, or four decades ago. For one thing, the disciplines have become more complex, and the body of knowledge and techniques that must be mastered has increased substantially.

Today a large fraction of the Ph.D. recipients in the social sciences have a considerable degree of sophistication in statistics, when as recently as two decades ago statistics was not required in many Ph.D. programs in the social sciences.

While we as yet have no way of measuring the extent of the change, we are quite confident that the educational service now provided by graduate departments is superior to that provided in the past.

On the other hand, it is almost certainly true that the increase in productivity of resources engaged in graduate education has lagged behind that for the rest of the economy. And except for the improvement in the quantity and quality of the knowledge transmitted through graduate education, there have been few other changes made that could contribute to increased productivity. In broad outline the methods of graduate instruction are very nearly the same as in the past. Except for a number of beginning graduate courses, most graduate education occurs in relatively small classes and seminars and in a quite direct, one-to-one relationship between a faculty member and a student in the supervision of research and the writing of the dissertation.

We wish that we could hold out hope for a significant change in effectiveness with which resources would be used in the future. While we believe that some changes can be made, and these are discussed below, we do not see that the basic structure of graduate education in the social sciences will change very much in the reasonably near future.

In fact, we see some trends that are likely to increase the cost per student. It is our impression that as specialization within the disciplines has increased, there has tended to be a rise in the faculty-student ratio. This could be offset if universities could reach agreement to emphasize different areas of specialization. The Committee on Institutional Cooperation has been attempting to work out arrangements of this sort, including, among other things, the easy movement of graduate students among the universities; but there is little evidence that a significant impact has been made.

The Committee recommends exploration of cooperative library projects for the purchase of less frequently used research journals (perhaps on microfilm) and provision for rapid access to centralized holdings by cooperating universities possibly by computer print-out.

In recent years advocates of programmed learning, audio-visual aids, and other similar approaches to learning have argued that substantial economies could be realized. Even if there were clear evidence that such techniques resulted in substantial economies in the presentation of elementary and standardized knowledge, it is doubtful if there is much room for their use in graduate education. Some opportunities probably do exist in language training, especially in the rather unusual languages or the languages studied by relatively few at a given university.

Some of the means by which the costs of graduate education in the social sciences might be reduced include:

1. Improved selection procedures: There is a very high dropout rate among graduate students in the social sciences; it is significantly higher than in the natural sciences. A part of the high dropout rate is due to inadequacies in selection procedures and, perhaps, lack of knowledge on the part of graduate students of what is involved in being a student in a given department.

2. Reduction in the time required to complete degree requirements: There are several factors involved in the long elapsed time required to obtain the Ph.D.:

   a. Many students in the social sciences find it necessary to work part time while pursuing their studies.

   b. Many students do not complete their dissertation while in residence, but attempt this task while holding a full-time position.

   c. Much less than full use is made of the summer; in some cases this is due to the student's need to earn money.

   d. Lack of available faculty during the summer.

   If more fellowship support were available and if more faculty were on eleven-month appointments for instruction, some reduction in the time required to obtain a Ph.D. could be achieved. There is also room for improvement in dissertation supervision through increased use of seminars and workshops. In some areas it may be possible to change the concept of the appropriate scale and scope of the acceptable dissertation; in certain fields the length of dissertations tends to be so great that completing a dissertation is more of a test of endurance than of ability. Here the social scientists probably have a great deal to learn from the natural scientists. More emphasis should be given to the selection of appropriate thesis topics. The search for the "new" may often lead to the explication of the trivial; greater emphasis should be given to building on existing knowledge. There are many opportunities for interesting and important problem-solving research undertakings, and these opportunities should be more fully exploited than now seems to be the case.

3. Curricular revision: In many graduate departments there may be too many courses taught too often, requiring more faculty time from uses that might be more relevant for graduate education. At the present time there seems to be no real incentive in most departments to review periodically the curriculum. Where there are relatively fixed teaching loads, dissertation supervision is given little or no weight, and a decision to offer a given course every other year rather than annually will only result in a given professor having to prepare and to give a new or different course.

   Language requirements should be reviewed; a number of major universities have substantially reduced the language requirement in some academic fields, including the social sciences.